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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,294	07/24/2006	Marius Dichtl	KRZEU1.001NP	6949

20995 7590 09/22/2009  
KNOBBE MARTENS OLSON & BEAR LLP  
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IRVINE, CA 92614

EXAMINER
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PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

NOTIFICATION DATE	DELIVERY MODE
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09/22/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com  
eOAPilot@kmob.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,294	<b>Applicant(s)</b> DICHTL, MARIUS	
	<b>Examiner</b> JOSHUA L. PRITCHETT	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-38 is/are pending in the application.
- 4a) Of the above claim(s) 10-16,23 and 31-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9,17-22 and 24-30 is/are rejected.
- 7) ☒ Claim(s) 8 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is in response to Amendment filed June 30, 2009. Applicant amended claims 1, 8, 23 and 29 added claim 38 and cancelled claims 3 and 4.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-7, 9, 17, 18, 20, 22 and 24-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 2001/0043396).

Regarding claims 1 and 22, Lee discloses a grating image having one or more grating fields each of which includes an electromagnetic radiation influencing grating pattern comprising a plurality of grating lines, the grating lines being characterized by the parameters orientation, curvature, spacing and profile (Figs. 1-4) wherein in the grating image, a grating field that is separately perceptible with the naked eye (para. 0065) includes an electromagnetic radiation influencing grating pattern having grating lines for which at least one of the characteristic parameters orientation, curvature, spacing and profile varies across the surface of the grating field (Figs. 1-4). Lee discloses the varying characteristic parameter exhibit a random variation

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across the surface of the grating field (para. 0069). Lee teaches all the claimed structural elements of the apparatus and therefore would be capable of performing the claimed functional limitation of no diffractive effects displayed (MPEP 2114).

Regarding claim 2, Lee discloses the grating field includes an electromagnetic radiation influencing grating pattern comprising uninterrupted grating lines (Fig. 1).

Regarding claim 5, Lee discloses the grating field includes at least one further electromagnetic radiation influencing grating pattern having grating lines for which at least one of the characteristic parameters orientation, curvature, spacing and profile varies across the surface of the grating field (Figs. 2-3).

Regarding claim 6, Lee discloses the electromagnetic radiation influencing grating patterns exhibit a variation in those same parameters (Figs. 2-3).

Regarding claim 7, Lee discloses the grating lines of the electromagnetic radiation influencing grating pattern differ from one another by a non-varying characteristic parameter (Fig. 10).

Regarding claim 9, Lee discloses the grating field exhibits different optical brightness (MPEP 2114).

Regarding claim 17, Lee discloses the grating lines are electron beam lithography produced (para. 0009).

Regarding claim 18, Lee discloses the grating lines exhibit a line profile depth between about 100 and about 400 nanometers (para. 0065).

Regarding claim 20, Lee discloses the grating image includes a machine readable identifier that is not visible with the naked eye (para. 0077).

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Regarding claims 24-28, Lee disclose a security element with a grating image (para. 0003).

Regarding claim 29, Lee discloses the varying characteristic parameter exhibit random discontinuous variation across the surface of the grating field (para. 0069).

Regarding claim 30, Lee discloses the non-varying characteristic parameter is the orientation of the grating lines (Fig. 10).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2001/0043396) in view of Argoitia (US 6,815,065).

Lee teaches the invention as claimed but lacks reference to a coating. Argoitia teaches coating the grating image with a high index material (106; Fig. 1A). Argoitia further teaches a color shifting film coating the grating image (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Lee invention include the

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coating of Argoitia for the purpose of protecting the grating image and adding additional optical features to the structure.

### ***Allowable Subject Matter***

Claims 8 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach or suggest the grating field forms a matte pattern.

### ***Response to Arguments***

Applicant's arguments, see Amendment, filed June 30, 2009, with respect to claim 8 have been fully considered and are persuasive. The rejection of claim 8 has been withdrawn. Applicant argues the continuous variation of the background structural elements pattern is technically inconsistent with forming a matte pattern. Examiner agrees.

Applicant's arguments filed June 30, 2009 have been fully considered but they are not persuasive.

Applicant argues Lee fails to disclose a characteristic parameter of Lee varying. Applicant specifically argues Lee discloses the interstitial elements are randomly distributed but

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not the background elements. Figs. 6a and 6b of Lee show the spacing between the grating lines change at the overlap location near the middle of the figures. Spacing is listed as a characteristic parameter in the claim language. Therefore the examiner interprets the Lee reference as satisfying the claimed limitations.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA L. PRITCHETT whose telephone number is (571)272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua L Pritchett/  
Primary Examiner  
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